

AGRICULTURE

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VOCATIONS

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Abraham Lincoln's Vocations

Agriculture

Excerpts from newspapers and other
sources

From the files of the
Lincoln Financial Foundation Collection

HE FARMED With LINCOLN ROBERT W. PATTEN



WHEN Abraham Lincoln worked on his father's farm Robert William Patten worked by his side. Patten lives to-day, and at the age of 98 years is as spry as a youngster. Grizzled, bronzed and ruddy from the winds and sunshine of an outdoor life, Patten sailed into the editorial rooms of the Call the other day and his smile illuminated the whole place. 2.12.1905

Old man Patten has come down from Seattle on his way to New Orleans. He is never happy unless he is migrating like the wild goose. He was born at Summer Hill, Cayuga county, N. Y., on February 24, 1811. He is proud of the fact that he was Lincoln's workmate in the old days on the farm.

"I first met Abe," he said, "when he was living with his father, mother and sisters on the farm, raising cattle and general farm products. I took up 160 acres adjoining and helped Abe with the work in return for the loan of his horses for work on my place. We were overrun with wild deer, geese and brant, and it was almost impossible to raise anything, for these pests would come in the night and clean up everything except the weeds. I lived with old man Lincoln and slept with Abe for a long time. Well, I take that back—I mean I tried to sleep in Abe's room, but I had a hard time of it, for Abe used to sit up nearly all night reading books. He had a little round tin pan with the side about three inches high. This he filled with wild goose oil. Then he stuck a rag in the oil and let one end hang over the edge. When this rag was lighted it made a pretty good electric chandelier, and how he would read!

"What did he read? Why, everything in print that he could get hold of. The Bible, histories, story books, any old thing that he could reach that had print on it. Whew, how that old rag used to stink! It used to keep me awake half the time, and I often wondered how Abe was able to lose so much sleep at night and do so much work in the daytime.

"I stayed four years with them on the ranch, and then the old man rented out the farm and Abe went to school in a university at Chicago.

"After that I drifted about the country acting as a scout, guide and Indian

fighter until the civil war, when I enlisted in the union army. I was badly wounded and was taken to the hospital on Fourteenth street in Washington. Mr. Lincoln was president at that time. One day he saw me lying in my cot and squeezed my hand so hard that he hurt me. On the next day Mrs. Lincoln, his wife, came to the hospital with delicacies for the wounded boys, and I remember that was the first time that I ever tasted cornstarch. Mrs. Lincoln took me from the hospital in her carriage to the White House, where I was treated as tenderly as a sick baby. I remained there 12 weeks and Mrs. Lincoln nursed me."

The most stirring adventure that old man Patten relates is that of his hand-to-hand combat with the noted Indian chief, Black Hawk, in which Patten killed the savage. He exhibits with pride a scar extending half way around his left wrist.

"That was from Black Hawk's knife," he said. "We were on foot, each armed only with a knife. I had a regulation bowie knife that I could use expertly and Black Hawk had a knife somewhat longer that was as sharp as a razor. When we came together he made a quick lunge at me with his knife and I threw out my left hand to catch his wrist. That was how I got the cut, but in a jiffy I grabbed his right wrist and drove my bowie knife into his heart. He sank dead at my feet. The blood spurted all over me. It was a horrible sight, but he was a cruel, bloodthirsty murderer of defenseless women and children, and I consider that I did a good job when I killed him."

Patten for a time was a scout with Kit Carson and came to California as guide for Gen. Fremont. He served with honor in the Mexican war and has not yet settled down to a civilized mode of life, says the San Francisco Call.

"There's a good deal of the wild goose in me," he added. "I want to be out in the wilds all the time. I was the first white man that ever went to Dawson. At that time I was a trapper for the Alaska company. I'm tougher than a biled owl and, with all my years, if I should ever get into a scrap I think I could hold my end up pretty well."

Patten roosts in Seattle. He intends to start soon for a trip to New Orleans and back up the Mississippi river.

Lincoln on Agriculture

To speak entirely within due bounds, it is known that 50 bushels of wheat and 100 bushels of corn can be produced from one acre.

Take 50 of wheat and 100 of corn to be the possibility and compare it with the crops of the country.

Unquestionably it will take more labor to produce 50 bushels from an acre than it will to produce 10 bushels from the same acre; but will it take more to produce 50 bushels from one acre than from five?

More thorough cultivation will require more labor to the acre, but will it require more to the bushel?—Abraham Lincoln.

LINCOLN ON THE FARM.

Country Gentleman: Any little personal incident about Abraham Lincoln is eagerly read. After a generation, the interest in this wonderful man is wider and keener than ever. Recently, in printing a forgotten letter written by Lincoln touching a question of value to farmers, we mentioned that he once kept store. It called forth a letter from a native of Sangamon county, Ill., who knew William G. Green, who bought the store. He says Lincoln never owned it and that he was therefore never sold out under execution. This flatly contradicts many biographers. One of the most important of them—Miss Ida M. Tarbell—relates with much detail how Lincoln was part owner of several stores. The main importance of all this is that in his dealings he bought an old barrel for a song—and at the bottom of the barrel found a complete edition of Blackstone's commentaries, after which he does not seem to have had much time for storekeeping. Whether or not Lincoln was a genuine merchant we leave to the biographers.

What we were and are interested in is his connection with farm life. His forbears owned farms, first in New Jersey, then in Virginia, then in Kentucky. His father inherited nothing, but secured a farm by the time he was 25. Abraham was born in "a one-roomed cabin with a huge outside chimney, a single window and a rude door." The Lincolns had "a cow and calf, milk and butter, a good feather bed. They had home woven 'kiverlids,' big and little pots, a loom and a wheel." As a boy Lincoln carried water, plucked berries and dropped seeds. The farm included three fields with high hills and deep gorges.

As a man Lincoln told how when a boy he spent Saturday afternoon dropping pumpkin seeds over the big field, only to have a storm Sunday morning wash them all out. The family moved to Indiana, and there the land had to be cleared. It was primitive work. Abraham slept in the loft on leaves and climbed to his rest on pegs driven into the logs. For food there were corn dodgers and potatoes. Abraham cut much with the ax, handled the plow, wielded the sickle, thrashed wheat with a flail and drove the team. He was farm hand at 21 cents a day—and his father got the money. "Every lull in his daily labor he used for reading, rarely going to his work without a book," says one account.

Then came the removal to Illinois; here Abraham worked for his father until he reached his majority. There he did his famous rail splitting. After he struck out for himself he made his way as rail splitter and farm hand for a year. Then followed his other occupations—boatman, ferryman, clerk, surveyor. And whenever he could he was reading good books. Afterward came all the other things leading to fame.

Lincoln got the basis on the farm, but the rest of it belongs to the world. Neither farm nor store nor any occupation could contain all that genius, any more than a chicken coop could hold an eagle forever.

A Long Pull and A Strong Pull and A Pull All Together —Steady Now!

NEWS dispatches are full of statements to the effect that business is going on as usual, that everybody is feeling jolly because the depression is past and that another era of spending is just around the corner.

This is the sort of news which experienced editors classify as "important, if true." If it were true it would not have to be published, for everybody would know it. As a matter of fact it is not true, and the Pathfinder is not going to be among those who kid the people and try to make them think that their troubles are all over.

We who know what the actual conditions are which exist among the farmers and the workers in the small industries know full well that there is a lot of hard going before either those classes or the big business interests will be on Easy Street. The Pathfinder travel editor has just come in from an investigating trip in the rural and smalltown districts, and that is his verdict.

Understand—the Pathfinder is not pessimistic or blue. On the contrary, we see our way out of the woods; we are inspired by new confidence, and we can see great things ahead. But we are not going to announce that we are there yet.

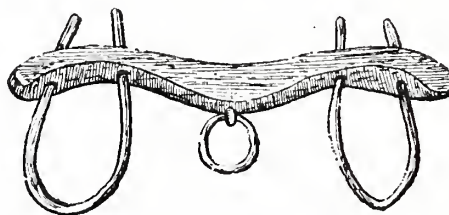
In times of stress like these we can well go back to the examples of such men as Thomas Jefferson and Abraham Lincoln. When Jefferson found the price of an article too high he made it himself. He brought his ingenuity to bear, and he got up many little inventions and useful devices. He depended on himself and his own efforts; you never heard of him grouching at conditions or sitting idle and waiting for somebody else to help him.

Lincoln was the same type. He wasn't born with a silver spoon in his mouth either. About everything he had, about everything he did, was the result of his own initiative and painful effort. It takes our colleges four years to turn out a surveyor, but Lincoln made himself a surveyor in six weeks by his own studies. He even learned to use "logarithms," as well as to split logs. When Lincoln needed a new yoke for his ox team, he

made it himself. No university can claim that it ever gave Lincoln a "degree," but the University of Illinois is proud of that ox-yoke which Lincoln made. What a grand lesson that ox-yoke teaches to all of us who are willing to learn!

Ox teams are still used in the back districts in many parts of this country, as well as other countries. There is nothing quite equal to a steady old ox team for pulling you out of the hole—and it's a hole this country is now in. Drivers of oxen control them by simply talking to them. They know better than to beat their oxen; they use gentle words, and coax them to do their best.

And that again is what we all need right now. There's a lot of good stuff



Ox-yoke made by Abraham Lincoln, in the collection of the University of Illinois.

in us, but we need encouraging words; we have kicked against the pricks far too long.

An ox team gives a strong, steady pull; they throw their weight into the yoke, and along comes the load. Jerking won't do it. Some people, who don't know ox nature (or human nature) think that this country can be yanked out of the hole by a series of jerks. Not so.

Steady all! It's a long pull and a strong pull and a pull all together! The load is moving—but we must all keep pushing. If you catch any of those big-bugs riding, knock 'em off! This is no time for anybody to ride—if there ever was such a time.

U. S. DEPARTMENT OF AGRICULTURE
Washington, D. C.

RELEASE ON DELIVERY

ABRAHAM LINCOLN AND THE HISTORICAL BACKGROUND
OF THE DEPARTMENT OF AGRICULTURE

Address of M. L. Wilson, Under Secretary of Agriculture, at 12:30 p.m., Monday, November 15, at the Lincoln Memorial Program, Washington, D.C., in connection with the 75th anniversaries of the U.S. Department of Agriculture and the Land Grant College system.

The present occasion marks the first time that the Department of Agriculture has observed an anniversary with much ceremony. Twenty-five years ago the fiftieth anniversary was the subject of some simple observances; otherwise anniversaries have come and gone without celebration or ceremony. The passing of time, however, has demonstrated more and more that we really have something worth celebrating, and that this seventy-fifth anniversary merits observance.

The Department of Agriculture has a record of service of which it is naturally proud. Its accomplishments might be related in long detail. But we believe that they speak well enough for themselves, and this occasion will not be used for that sort of self-congratulation. However, American agriculture and its institutions have a rich national heritage. They have developed under favoring traditions and circumstances that in some cases appear unique. It seems wholly fitting therefore to give attention at this time to some of these traditions and circumstances.

The United States began as a predominantly agricultural nation. Our oldest traditions are rooted in the life of the farm. Our largest single group of national heroes, the pioneers, were farmers. And the three men who by common acclaim rank as the great heroes of this country were all intimately associated with agriculture and agricultural progress.

George Washington was a farmer. He pioneered the use of the most advanced methods of cultivation. He conducted many agricultural experiments of his own. As President, he was the first one to suggest officially that the newly formed federal government should establish an agency to promote agricultural progress and development.

Above all, by his application of science and high intelligence to the problems of farming as well as by his own sterling character, this American Cincinnatus personified the dignity that forever belongs to agriculture.

Thomas Jefferson, like Washington, was both a practical farmer and an agricultural experimenter. In his own right he made important contributions to the development of agricultural science in this country. He was the greatest advocate of the agrarian interest that this country has ever had. At the same time and largely for that very reason, he was the great champion of real democracy during the important early years of this republic.

Jefferson appears therefore as the great and eminent representative of the natural affinity between agriculture and democracy.

Abraham Lincoln was born to the subsistence farming of the frontier, and grew up as a son of the prairies. If as some say he began by representing sectional interests, there is no doubt that he died a martyr to the cause of national unity. It is often stated that Lincoln saved the union that Washington and Jefferson labored to create and form. It is also true that Lincoln assisted in the completion of a national agricultural structure for which Washington and Jefferson had helped to lay the foundation.

When Lincoln signed the acts establishing a Department of Agriculture and providing for a nation-wide system of Land Grant Colleges, he brought to a successful conclusion a long struggle to raise agriculture and agricultural education to the plane of recognized national concern. The national unity of agriculture has since then developed inevitably. Where once one section of the country pitted its interests against those of another, today the nation's agriculture is united, and corn, cotton, wheat and cattle growers work together toward national solutions of their problems. Out of this united effort comes a greater understanding and tolerance of our neighbor's interests and point of view.

Thus the agricultural development of America is closely associated with the three greatest names in American history. A retrospective observance of the seventy-fifth anniversary of the Department of Agriculture very naturally inclines to shape itself around these three men.

There is another point that must be mentioned here. This is as much the seventy-fifth anniversary of the Land Grant Colleges

as it is of the Department of Agriculture. It is no mere accident that the anniversary is shared. The Land Grant Colleges and the Department of Agriculture were the creation of the same popular demands. They were intended to serve closely related purposes, and to supplement each other in the service of the same public interests. They are of the closest kinship.

The Land Grant Colleges represent not only the first but by all odds the greatest attempt ever made to launch a vast and far-flung educational system that would make higher education available to the masses. It is interesting to note that both Washington and Jefferson were pioneers in this field, too. Washington suggested the establishment of a national university that would serve many of the same needs that the Land Grant Colleges were created to meet. Jefferson was a life-long worker for popular education, and the founder of the University of Virginia.

Agriculture and education have progressed in this country under a common leadership. It is a noteworthy fact that during a long period of our history the individuals and the groups that were active in advocating agricultural betterment were in the forefront among those seeking to improve our educational systems.

One other powerful force deeply influenced the formation of those institutions whose anniversary we now observe. That is the pioneer tradition. This is no place for a eulogy of the pioneers, but it is to the point to call attention to one very important phase of the pioneer tradition that is frequently overlooked. The pioneers were more than just the physical conquerors

of a continent. They were a spiritually restless lot. They saw beyond present horizons. For all their rough contact with untamed nature, they were visionaries, and dreamers of dreams. They believed they were building even more than farms and towns and homes in the wilderness; they believed they were building a civilization better than any they had known and better than any that had gone before. They built log cabins for themselves, but they dreamed of mansions.

Many a pioneer who had never learned to read or spell turned his hand to the building of a school as soon as the first harvest was in. The pioneers reached beyond themselves. They wanted and struggled for things that had never been before. And so it was that the movement for the Land-Grant Colleges drew great force and leaders from the pioneering West, though it was rooted in the older East and South also.

The pioneer tradition, and the tradition represented by the three great Americans around whom this anniversary observance is centered, form the background for the acts of 1862 which we are celebrating. Both acts embodied pioneer ideals and answered the demands of our pioneering and agrarian population. Both were the culmination of trends as old as the Nation itself, and to which both Washington and Jefferson had contributed.

George Washington as President had suggested to Congress the establishment of a "board of agriculture" in his last annual message in 1796. In 1817 an attempt, originating in Massachusetts, was made to found a department in the federal government for the

aid and encouragement of agriculture. In 1838 citizens of Kentucky petitioned for the formation of a "Department of Agriculture and Mechanics." In 1840, there was a petition for "the establishment of a department of the Government, to be called the Department of Agriculture and Education." By 1850, the Committee on Agriculture of the House of Representatives had received "resolutions from several state legislatures and of agricultural societies on the establishment of an agricultural bureau in the Department of the Interior." President Fillmore repeatedly urged the establishment of such a bureau. Through the fifties the proposals multiplied rapidly.

Organized interest in agriculture had slowly grown in every way since the earliest days. An Agricultural Society was formed in South Carolina in 1784. A year later a Philadelphia society was formed, in which Benjamin Franklin was a prominent member. In New York a Society was formed in 1791; in 1792 a similar Society was established in Massachusetts, and Connecticut followed suit in 1794. From then on the movement grew and societies multiplied. By 1852 there were about 300 active agricultural societies spread over 31 states and 5 territories, and in 1860, there were well over 900.

A movement for the development of a national agricultural organization accompanied the growth of local societies. In 1840 agricultural leaders called a national meeting in Washington, and in 1841 the Agricultural Society of the United States was formed. After one meeting this organization broke up, to be succeeded in 1852 by the United States Agricultural Society which thrived from

the very outset. This organization immediately became the great champion of the idea of a department of agriculture. It soon became also the sounding board for the plan, coming from pioneer Illinois, for the establishment throughout the union of industrial and agricultural colleges financed by grants of land from the public domain.

Meanwhile, the various states had gradually and one by one come to the support of private efforts to aid agriculture. In 1819 New York State established a board of agriculture and began to appropriate money for its advancement. In the same year Massachusetts began appropriations of money to aid agricultural societies and otherwise to improve farming. New Hampshire followed closely with a similar law in 1820. In 1839 Ohio began to give financial support to agricultural societies, and a few years later, established a state board of agriculture. At the same time there was a rapidly growing tendency for states to appropriate money for distribution as prizes at agricultural fairs. In one or another form, most states by 1840 were lending tangible aid to the encouragement of an improved agriculture.

The federal government began to recognize the national status of agriculture almost in spite of itself. In 1827, consular agents abroad were asked to collect and send to America foreign seeds and plants that might be useful to this country. No means, however, were provided for the proper care and distribution of these seeds. Not long after the Patent Office was established in 1836, its Commissioner, Henry Leavitt Ellsworth, took it upon him-

self to collect and distribute these. In 1839 Congress for the first time appropriated money for the distribution of seeds and the collection of agricultural statistics. These appropriations were rapidly increased, and the agricultural services of the Patent Office gradually extended until a separate department was established in 1862.

These historical details indicate the growing accumulation of needs upon which the Land Grant Colleges and the Department of Agriculture were established. They came on the crest of a long, irresistible ground swell of public sentiment. Those who are philosophically inclined or historically minded will observe the pattern of development: first, individuals took up the cause; then societies of private individuals; these enlisted support first from the states, and finally from the federal government. This chain of causes and events reveals the growing national unity of the varied states and sections of this country. It discloses the tendency which is as old as our country for the people to demand federal action when individual, local, and state efforts prove inadequate.

The peaceful acts of 1862 which we now celebrate, are significant for many reasons. The establishment of the Department of Agriculture constituted the recognition by the government of the needs of the diverse multitude that by sweat and strain provides the bread we eat and the clothes we wear. This is practical application of democratic principle; it denies that governments will eternally yield to the demands of concentrated and entrenched economic interests, while failing to heed the scattered voices

of those who are actually most numerous.

The Land Grant College Act was an application of America's faith in progress and in education. It served eventually to establish a great and unique system of schools of higher education throughout the whole United States. It advanced the cause of enlightenment among a pioneer people who were as truly pioneers in the field of popular education as in any other sense. It was an important pillar in the national temple of a people possessed of an abiding faith that "Ye shall know the truth and the truth shall make Ye free." It was characteristic of a pioneer people who conquered a wilderness with sweat and blood, yet who in the midst of immense physical hardships retained a belief that there is more wisdom than folly stuffed in books. It is characteristic of them that they were eager not only for old truths, but did not fear the inquiries that extend man's knowledge beyond old boundaries.

A third act passed in the same year deserves mention here because it was cut from the same home-spun. The Homestead Act was also a response to demands that were strongest among the pioneer-farmer elements. The purpose of the act was to put a stop to the acquisition of public lands for speculative purposes, and instead to make them available to bona fide settlers who would develop and work their own farms. Although later abuses prevented this act from accomplishing all the good its framers intended, it served nevertheless to open the frontier to the little man. It made land and jobs available to all those landless and jobless ones who had the strength and will and courage to go forth into the

wilderness and work the land and do the job. It held open that constantly shifting frontier which for a century was the strongest bulwark of American democracy and which was the real source of America's fame as a land of opportunity.

In 1862 this country was split in two, and bitter war was raging between North and South. At this time of greatest discord and of most embittered sectionalism, Congress quietly passed these laws of peace and unity which in the long years since have worked a great good to the people of every state and of every section of the country.

There is a symbolism here, for the hand that signed them was the hand that saved the political union of this country. Abraham Lincoln, in whose honor a wreath has just been laid at the Memorial, was molded in the pioneer tradition. He was the product of that pioneer, agrarian civilization that established the most cherished of American traditions. His creed was based on conceptions of unified interests and progressive tenets, and a sympathetic understanding of common men. He personified the pioneer spirit in his own self-education, his zeal for progress, and his rare combination of high idealism and uncommon good sense concerning the realities of life. Abraham Lincoln was, in brief, the product of those same forces and traditions which found expression during his presidency in the establishment of institutions recognizing the dignity, the importance, the national scope, and the progressive interests of agriculture.

Agriculture and its institutions today remain true to the pioneer spirit of which the Department and the Land Grant Colleges were born. They are still animated by and endowed with the urge to proceed from goal to goal into a horizon that is ever widening. Agriculture tries to be realistic enough to employ practical expedients, and far sighted enough to guide action by the highest ideals and objectives. It is democratic and believes profoundly in the ability of the people to govern, and believes that the people in fact must govern. It serves the interest of a whole nation; it knows its own interests are spread to every county in this country, and that its own welfare is bound up inextricably with the welfare of all sections and all classes.

Agriculture knows that pioneering days are not over. The problems and the frontiers of today are not the problems and frontiers of yesterday. Yet I think we can do no better today than to follow the spirit of the pioneers. Let us borrow from their courage, their resourcefulness, their optimism, their zest for life, their readiness to adopt measures to suit circumstances, and with alertness and confidence, face the unknown future as they once faced the unknown west.

UNITED STATES DEPARTMENT OF AGRICULTURE

Release When Delivered.

THE ROLE OF GOVERNMENT IN AGRICULTURAL DEVELOPMENT

Address delivered by H. R. Tolley, Chief,
Bureau of Agricultural Economics, U. S.
Department of Agriculture, at the American
Association for the Advancement of Science,
Milwaukee, Wisconsin, June 23, 1939.

Eighty years ago the Wisconsin State Agricultural Society was meeting in Milwaukee. The appearance of Milwaukee then was different from what it is now, but not nearly so different as was the city's hinterland. Outside its borders stretched away a State that was, in the words of the principal speaker of the Society's fair, "young, prosperous, and soon to be, great." That speaker was Abraham Lincoln. Mr. Lincoln's administration is one of the three or four most important in our history, so far as the relationship between Government and agriculture is concerned, yet the address he made here then was the only extended address on agriculture that he ever made.

"I presume I am not expected to employ the time assigned me in the mere flattery of farmers, as a class," he said in introducing his theme. "My opinion of them is that, in proportion to numbers, they are neither better nor worse than other people. In the nature of things, they are more numerous than any other class; and I believe there really are more attempts at flattering them than any other; the reason of which I cannot perceive, unless it be that they can cast more votes than any other. On reflection, I am not quite sure that there is not cause of suspicion against you, in selecting me, in some sort a politician, and in no sort a farmer, to address you." 1/

1/ Washington, Jefferson, Lincoln and Agriculture. U. S. Department

Now, Lincoln's day was a day much like ours, for all its external differences. Old molds were cracking and new vessels were being prepared for new wine. Two years after his Milwaukee speech he was the President of a country that was split in one of the great civil conflicts of history. And this quotation from his speech seems to me to strike a note that then was essentially new. This is its frank recognition of the elective basis of politics, the political basis of much agricultural change, and the stake of each in the other.

Indeed, the remarkably concrete nature of Mr. Lincoln's thought with respect to farmers and farm problems is evident throughout his speech in this city in 1859, much as the specific details with which he dealt may have changed. He emphasized the importance of education for the rank and file of farmers, thus foreshadowing in some sort the Smith-Lever Act of 1915; he discussed at great length the potentialities of mechanical plowing; particularly modern is the alarm he expressed at the decline in grain yields, with the implications of already perilous erosion; finally, his respect for "book learning" and the need he indicates for fusing this "book learning" with practical experience are of close concern to us here today.

Inspecting his words to the Wisconsin farmers of 1859, we are reminded that it was in Mr. Lincoln's administration that the Department of Agriculture was set up, that the Homestead Act was adopted, and that the Land-Grant College system was established. All of the acts embodying these advances, each in itself of far-reaching import to American agriculture, were signed by Mr. Lincoln

in 1862, within a few weeks. Yet it must be remembered that each was the outgrowth of long-continued public demand by the agricultural population for effort on the part of the Government in its behalf.

And it seems to me that in his Milwaukee speech Mr. Lincoln is recognising the validity of these demands of the people, demands that call upon the sciences, and particularly upon the social sciences, just as much as upon Government. This claim of the people is for recognition of the people's needs. It seems to me, too, that the recognition of those needs forms a common ground for all of the social sciences, not only for the economists but for social and other psychologists, for sociologists, for political scientists, for cultural anthropologists, and for all the others. In recent weeks in the Department of Agriculture we have been exploring these sciences with a view to finding out what they can offer to Government and what Government can offer to them. We have had generous help of leaders in many of the fields I have mentioned. And I have come to believe, as a result of these conferences and of reflection upon the matter, that all of the social sciences can contribute in greatest degree to human welfare if their work is organized around those problems on which the people want help. The people have a right to ask this concern from the social sciences, and if this just demand is met then not only will the people benefit, but the social sciences themselves will be invigorated.

In our day, we have seen a tremendous increase in the demand of farm people for Government assistance. We have seen, too, an equally great increase in the efforts of Government to meet this demand, together with more varied ways of trying to help farmers.

But the history of Federal efforts to deal with agricultural problems goes far back, much farther indeed than Mr. Lincoln's administration. The long struggle during the early decades of our country's existence between the advocates and opponents of internal improvements, the boldness with which Thomas Jefferson seized his chance to acquire New Orleans as the all-important agricultural outlet of the young republic, even the long struggle to reduce or eliminate tariffs in an effort to maintain this country as an agricultural country - all of these were different facets of governmental assistance to agriculture usually designed to rectify what farmers regarded as economic inequalities.

But more important than all other political activity to assist farmers was the Federal land policy, which reached something of a culmination in the Homestead Act of 1862. I do not need now to dwell upon the accompaniments of error and misdeed that marked our land policy. We are all acquainted with the Yazoo Frauds, with the bitter fate of the Indians, with the lavish land gifts to railroad companies. We are aware, too, of the wasteful exploitation that accompanied the westward surges of people and with the grave error of the Homestead laws themselves in restricting settlers to 320 and 640 acres in regions where thousands of acres are required for a livelihood in this day. When all this catalogue of tragedy and error is completed, however, the great fact of explosively energetic settlement and civilization remains. It will not profit us now to cry over the spilt milk of land policy, or to praise it unreservedly as "the American way" or any other way. For good or ill, our land policies in the past have been the response of

Government to an overwhelming demand of the people for land, for cheap land, for free land.

Still another response of Government to the people was evident in the establishment of the Department of Agriculture. In his announcement to Congress of the establishment of the Department, Mr. Lincoln set forth the nature of this response.

"The Commissioner (of Agriculture) informs me that within the period of a few months this Department has established an extensive system of correspondence and exchanges, both at home and abroad, which promises to effect highly beneficial results in the development of a correct knowledge of recent improvements in agriculture, in the introduction of new products, and in the collection of the agricultural statistics of the different States.

"Also, that it will soon be prepared to distribute largely seeds, cereals, plants, and cuttings, and has already published and liberally diffused much valuable information in anticipation of a more elaborate report, which will in due time be furnished, embracing some valuable tests in chemical science now in progress in the laboratory." 2/

The Department thus was designed to comply with the insistent call for collection and diffusion of information, and for physical and economic research. This insistence on the part of agriculture likewise was reflected in the Morrill Act providing for grants of land to the States for the establishment of agricultural colleges, grants that later were supplemented by cash aids in the second Morrill Act and the Nelson Act. Here again we are on familiar

2/ Senate Document 439, Sixty-second Congress.

ground. All of us remember the steady growth of this system of grant-in-aid and are aware of the contributions of the Department of Agriculture, on the one hand, and of the Land-Grant Colleges on the other, in the fields of economic and physical research and in making available to farmers the results of their findings. The culmination of this twin growth came in 1914 with the adoption of the Smith-Lever Act and the founding of the Extension Service, which this year is celebrating its first quarter of a century. Those 25 years have seen the county agent become a symbol of the relationship between agriculture and government.

The point I wish to emphasize, however, is that the Smith-Lever Act was still another departure in government's attempts to meet the demands of farm people. Where before the people had sought merely to get from Government the facilities for research and education, now they had demanded and obtained aggressive steps by Government to bring the fruits of research to the people. Let us notice, too, that these steps were a tacit admission that the assistance of the Federal Government was required in meeting the demands of the people. The State Governments alone could not meet those demands; if they were to do so, they required the support of the National Government. The Smith-Lever Act embodied that view; it also embodied another theory: That is, if the masses of the people are to be able to take advantage of the advances of research and action, then the people's Government must act to bring them to the rank and file.

From 1862 to 1914, however, is a long jump, especially in the history of a people so volatile and optimistically insatiable

as ours. The half-century after the Civil War gave birth to the modern restlessness of farm people, an intellectual as well as physical ferment, that coined the terms "agrarian discontent", "farm revolt", and the other phrases that have persisted down to our day until, as someone has said, the plight of the farmer threatened to rival the weather conversationally both in popularity and dullness.

This was the time when the Grangers called upon Government to end the abuses of the railroads, when the Farmers Alliance swept the West and South with its demand for Government backing for farmers' cooperatives and for new credit facilities to combat the rising costliness of farm land. And these were the days, too, of the Populists and of William Jennings Bryan's rallying cry for Government assistance to force a price and monetary structure more favorable to farmers.

What did it all mean, in terms of the relationship of Government to agriculture? Well, at bottom it meant a radical snift from the earlier conception of the role of Government. For these appeals were for direct Government help to give the farmer a secure and satisfactory level of living. We all know that he didn't get it, and that in the confusion and prosperity of war days and postwar booms, the cry of the farmer at first was softened by temporary high prices and then was concealed in the general glow of an industrial prosperity stimulated by an unhealthy loan-induced foreign trade.

Yet that breathing-spell was a delusion to those who thought that Government no longer had to bother with the economic welfare of the farmer. Our whole economy had developed threatening fissures

under a thin surface coating of prosperity, and when those cracks began widening in the twenties and thirties, the appeals of an outraged agriculture became more vocal than ever before. And always the cry was for help from the National Government, regardless of finespun theories about the role of Government. Such theories long since had been disregarded in the case of credit. It had been pretty generally acknowledged for many years that insofar as credit was afforded by Governmental agencies, the furnishing of that credit was almost exclusively a function of the National Government. But in the twenties and early thirties the various equalization fee and export debenture plans, and the Federal Farm Board, among other schemes were brought forward, all of them calling for the exercise of the National Government's power to improve the relative economic position of agriculture.

As the great depression deepened early in this decade, this long agitation for Governmental assumption of responsibility reached a climax. Early in this Administration, the Agricultural Adjustment Administration was set up to raise the level of farm income. The Soil Conservation Service later arose in response to the demand for Government assistance in solving an erosion problem that long since had gone beyond the ability of individuals to cope with. Purchase of submarginal land by the National Government was authorized in response to appeals for rebuilding an exploited public domain. The Farm Credit Administration, composed of several existing agencies, was established, to meet the call for better credit facilities. The Rural Electrification Administration became the answer to the cry for cheaper farm electricity and Government help in cooperative

action to get it. The Farm Security Administration evolved as the medium for meeting the appeal for aid to the lower economic groups of farm people.

The wheel had come full circle from the days when the pioneer farmer might be born, raised and buried on a wilderness farm where he never saw a tax collector or an agent of the Federal Government, to our day when the individual farmer is more than aware of the relation of that government's activity to his own well-being.

II.

And now, here we are, in a time of Governmental stresses and strains arising from economic and social pressures that have grown increasingly complex. This progression is almost mathematical: Greater and greater complexity of economy and living, stronger and stronger demands for action by the National Government to deal with these complexities. Does it follow with mathematical inevitability that Government also must grow more and more complex? Is there a way out, some way that will at once make Government an institution more useful to the people and yet keep it from becoming a bureaucracy as numerous and devouring as the locust?

In quest of an answer, let us look at the developing response of the National Government to its new responsibilities in recent years. Congress has replied to the new demands in an almost bewildering profusion of new laws and authorizations for programs and expenditures. The courts in their turn, despite such damaging actions as the invalidation of the earlier AAA in the Hoosac Mills case, have tended consistently in the direction of a liberalized

interpretation of the Constitutional authority to Congress to regulate interstate commerce and to legislate for the general welfare. Earlier this month, in its final opinion day of the last term, the Supreme Court affirmed the constitutionality of legal provisions whereunder Congress delegated to the Secretary of Agriculture its power to regulate the marketing of milk moving in interstate commerce. "This power over commerce, when it exists," said the majority opinion in one of the two cases, "is complete and perfect." I think it is worth noticing, too, that the Court regarded as one of the important circumstances in the case the fact that three-fourths of the producers had voted in favor of the order enforcing the milk marketing agreement.

And the executive branch of Government, for its part, has tried to make effective the intent of Congress in a thousand ways, many of which have been pioneering in new fields of Governmental activity. My special concern here is with this last branch of Government, since the executive branch in our day is the one that is supremely concerned in day-to-day dealings with people and the circumstances of their lives. It is to the Government administrators that the people, acting through Congress in laws validated by the Courts, have turned over in recent years more and more responsibility for their welfare.

How have these administrators gone about the management of this trust and the fulfillment of this responsibility? Suppose we cast a figurative eye over the part of the country that is our host, the Lake States. Even a cursory look at the operations of such an organization as the Agricultural Adjustment Administration, for

instance, opens a baffling perspective of problems and attempts at solutions. In Minnesota, for instance, in the AAA program for the 1937 crop year, 70 percent of all the cropland was included in the program, 75 percent in Michigan and 86 percent in Wisconsin.

AAA is, of course, both a soil conserving and an income-raising agency. These activities have included the purchase and diversion of agricultural commodities. In Minnesota, for instance, from July 1937 to May 1938, it bought \$217,000 worth of dry skim milk, eggs, peas and potatoes, in Wisconsin and Michigan more than \$900,000 each in similar commodities. In its campaign for building up the soil, the AAA program during the 1936 crop year resulted in seeding legumes and legume mixtures, perennial grasses for pasture establishment, and in planting forest trees on six and a half million acres in these three States, and in its diversion program that crop year production on more than 2,700,000 acres in Minnesota, Michigan and Wisconsin was shifted from soil-depleting to soil-conserving crops. Lastly, AAA spent for all purposes from January 1, 1937, through June 30, 1938, approximately \$18,400,000 in Wisconsin, \$12,555,000 in Michigan, and \$30,000,000 in Minnesota.

The figures that I have cited give you only a very sketchy indication of the magnitude of the AAA program. Suppose we look now at the program of the Soil Conservation Service. The SCS is now working with five soil conservation districts, set up under State laws in Minnesota, Wisconsin and Michigan. Thousands of farmers in those districts are cooperating in the management of more than 300,000 acres of their land, and the SCS is providing

them with technical advice and the loan of equipment for that work. In these States, too, the SCS has nine demonstration projects and is working through 23 Civilian Conservation Corps camps in its battle to preserve the physical basis of our agricultural economy. It also manages 12 land utilization projects, areas covering about 325,000 acres where Government purchase of land is the means for social and economic adjustment. In one of these projects alone, the Wisconsin Isolated Settler Project, Government purchases of land are being made in 24 counties to complement zoning ordinances enacted in those counties under Wisconsin's enabling acts.

Here we have seen something of the size of the job that Government tackles when it tries to raise farmer income and to conserve the soil. What about the task of helping the lower economic groups of farmers? The Farm Security Administration is the Federal agency that has this duty. In its program in Wisconsin it has made rehabilitation loans to 30,340 borrowers, in Michigan to 10,927, and in Minnesota to 36,834. The sums it has loaned have amounted to more than six and three-quarters million dollars in Minnesota, in Michigan to more than \$4,000,000, and in Wisconsin to more than \$6,000,000. The statistical measure of its success with this huge undertaking is in its recent survey of about 17,000 sample families in the three States, which showed that since midsummer of 1935, borrowers in Wisconsin had increased their average net worth from \$1,066 to \$1,522, in Michigan from \$1,259 to \$1,506, and in Minnesota from \$715 to \$1178 per family.

In these States, too, the FSA is shepherding the development of 16 resettlement projects, five each in Minnesota and Michigan and

six in Wisconsin, embracing more than 50,000 acres and 1,558 persons. Greendale, one of the three FSA suburban projects, is of course located just outside this city. We may regard these projects as social laboratories. They are mostly the scattered farm type, rather than community projects, but each embodies some phase of farmer cooperation, experimentation in part-time farming, and other testings that will yield practical results of great value in the development of future farm programs.

There are many other similar activities of the Federal Government in these States in addition to those I have cited. The National Park Service is progressing with its great Isle Royale Park in Lake Superior off the Michigan coast, and it has helped in building and promoting many of the more than 100 State parks in the three States. The Forest Service is administering two National forests each in Minnesota and Wisconsin, and five in Michigan, and at Madison is located its forest products laboratory. Indeed, more than 5,400,000 acres of land in these three States is now being administered by the Forest Service. Then, too, there is the Biological Survey, which has six wildlife refuges in Minnesota, the same number in Wisconsin, and four in Michigan, covering more than 218,000 acres of land. Some idea of the stake of the Federal Government here is possible when it is considered that in land purchase alone, these three agencies -- the Park and Forest Services, and the Biological Survey -- have an investment of more than \$11,800,000. This is without regard to development or any other costs.

It is not so much the success of any of these Federal programs that interests us at this moment as it is the sheer magnitude of the programs and of the problems they are attacking. There are those who will say that such success as has been attained in these efforts to help farmers has been at the cost of many mistakes, of mistakes that were too costly to justify the effort. That, perhaps, is somewhat irrelevant here. What is relevant is the question whether such programs should have waited upon more research and fact-finding so that possibly some of the mistakes that were made could have been avoided. The best reply to both irrelevant criticism and relevant question is that every attempt to curtail or abandon these programs has failed before popular pressure against such curtailment or abandonment.

Now, the words "popular pressure" are just another way of saying that there is a social necessity for the programs, a social necessity that implies a social duty on the part of administrator and researcher alike. It is not necessary to depreciate the value of research in order to insist that the researcher has a social duty. Nor is it necessary to argue that the research expert must desert his laboratory for the hustings on behalf of every finding he arrives at. But it is necessary in our time to insist that until research affects action, its value remains to be proved, just as it is necessary to insist that action cannot wait upon refinements of perfectibility in research. Through 1936, the experiment stations located at the Universities of Minnesota, Michigan, and Wisconsin had published since their origins 1,744 bulletins of all kinds. I do not doubt that by this time the number has entered its second

thousand. In search of these figures and other facts I called upon the library of the Bureau of Agricultural Economics for ten volumes containing bulletins of these three experiment stations going as far back as 1885. Now, if there is a place where vital living research would appear to be daily useful, it is in the library of the Bureau. Yet I discovered that, of those ten volumes, four had never been withdrawn from the library by a borrower before. One need not labor the point, and may admit such qualifications as the likelihood some of the four had been used in the library. Nevertheless, it seems to me a pertinent illustration.

Let us look inside ~~some~~ of those volumes. The agricultural literature of Michigan is voluminous, not least in it being the contributions of the experiment station. In 1894, after five years of experimentation at the South Haven substation, the experiment station said in a bulletin that "the Bordeaux mixture and other copper compounds were reliable remedies for many fungous diseases, but although our previous experience upon a small scale had led us to believe them of value for strawberry leaf-blight, raspberry anthracnose and peach leaf-curl, the experiments at South Haven the past year have fully convinced us that they should be freely used upon these plants whenever the diseases are troublesome." The value, potentially, of this work is unquestionable; one wonders only how many Michigan farmers since that distant day have been able to follow the recommendations. In 1899 the Michigan experiment station published a study of Michigan forests in which it declared that "there should be such a modification of the tax laws as will do away with evasion of tax payment.....; there should be such

provision made that finally all lands taken back by the State should be held in the same manner as those to which original titles can now be given." It added that after acquiring such title, the State should put the forests "under the charge of competent wardens, help along by planting, pruning and keeping out stock, and we will soon have another forest." Michigan, of course, took steps in this direction earlier than did most States, but these steps only emphasize the general tragic failure to heed such warnings and the herculean efforts that are now necessary in the Lakes States' cut-over. And in 1907, to choose one more from among many instances, the station, observing that "in general, it is the men with the smaller holdings of cattle who resort most to mixed breeding, and who are in greatest need of good sires," urged formation of "proper" farmer organizations to "present favorable opportunities for the discussion and adoption of methods of breeding best suited to the interests of the community."

Here in Wisconsin, too, the experiment station in 1895 observed in a study of the country about Superior that "there can be no question about the danger of serious injury being sustained by these lands through the drifting of the slightly coherent soil and by the destruction of crops early in the season and urged the "judicious reservation of certain tiers" of land. In 1916, the station warned that 50 percent of Wisconsin farms were subject to erosion and that in the southwestern part of the State "erosion occurs on at least 75 percent of the farms." "Erosion can be prevented in many instances," it added, "by careful tillage, by alternating crops on side hills, by the use of horizontal channels

and terraces, and by protecting the ravines and water courses." The Minnesota station in 1893 found that "the continued cropping of soils to grain crops only, without any system of rotation, or other treatment, is telling severely" upon the topsoil of the State. Three years later the station said that "our forest is being worked like a mine that cannot grow", that taxpayers are "seriously affected by the increasing areas of unproductive land", and concluded that the State "will own or control in the near future close to 5,000,000 acres of land within its forested area and a little needed legislation might result in making the title of the State perfect to the whole amount." Let me remark here that only just now has Minnesota adopted a law designed to establish clear title in the State to such land. I will revert to this law again in a later discussion of county planning.

It is not necessary to multiply these quotations further. All of us know how much in money and men the country would have saved if these and thousands of other findings had been put into practice. The instances I have given will suffice to show that the Federal farm programs were in part the result of years of accumulating neglect in applying the results of such research, and that they were charged with performance of a job on the basis of what was known rather than by the accumulation of more data.

The necessity for action on the basis of the best available information, without awaiting indefinite accumulation of data is one thing to notice about these gigantic public programs. A second thing to notice is that in every instance these agencies have been forced to turn to participation by the people, not alone

to save money in administration and to bolster democracy by spreading civic responsibility, but in order to achieve success for the immediate objects they had in view.

The AAA long since discovered that it must bring in local people, not only in deciding whether they wanted to participate but in actual administration of programs. Now, AAA operates through county agricultural conservation committees elected by the farmers in the county who are taking part in the program. The complicated job of applying the program to individual farms, including allocation of goals and allotments, explanation of details to farmers and obtaining acceptance of the proposed plans, checking on performance, and other work, is done through these committees. But for this decentralization, this drawing in of local people to help, it is not improbable that the vast AAA program would have fallen of its own weight.

In the matter of soil conservation, the appeal to the people was just as direct and immediate. I have pointed out that there are five soil conservation districts in Wisconsin, Minnesota and Michigan. These districts, organized under State laws, are a very pointed attempt to bring both the Federal and State Governments into closer contact with the individual farmer, to make Government real and immediate to the citizen - and vice versa. The Soil Conservation Service has proceeded from its start on the theory that progress toward saving our natural resources on any large scale is dependent upon action by the people themselves toward that end. It found, however, that some new medium was needed to enable the people to do this, because the cost of terracing,

contouring, listing and the other generally approved practices is too heavy for many farmers to bear alone, because reluctant minorities may wreak great damage upon the land of their neighbors, because land values and cropping systems may be out of line, to name only a few reasons. The soil conservation district, authorized by State law, set up by vote, governed by elective supervisors, was the answer of the Soil Conservation Service to the pressing question: How to make the people a functioning part of the Governmental process?

The FSA, on the other hand, starts with an entirely different problem, that of affording to low-income farm families the financial means and the counsel they need to get on their feet. It is doing this in two programs, rural rehabilitation and tenant purchase; and in both it has been necessary for FSA to obtain a great measure of popular participation. The making of rural rehabilitation loans depends for success upon the willing adherence by the borrower to a plan of operation for his farm that both the farmer and the FSA can agree to. Selection of farms for purchase and of tenants to occupy the farms in the tenant purchase program is in the hands of a State citizens committee which chooses from the recommendations of county citizens committees, and forwards its own choices to the Secretary of Agriculture for ratification. Under the rehabilitation program, in fact, a method of group meetings, is now under way, wherein farmers discuss with Government technicians the problems of making a plan of farm operation, then return home to draw up their plans themselves and submit these plans to the FSA for approval. Whether the plans are drafted this way, or in the customary manner of across-the-table conference of technician

and farmer, aggressive interest on the latter's part is the essential for the FSA as for the AAA and SCS.

These are only three among the many programs of the Federal Government for agricultural assistance, but they will suffice, I believe, to make the point that these programs have been forced by the very complexity of the problems they are attacking to turn to the people themselves. This necessity has been reinforced by the dangerous as well as stirring times in which we live, times that have led to the questioning of almost every political faith. We have seen fascism in Italy and National Socialism in Germany and military oligarchy in Japan grow from isolated patches of disease into what threatens to become a cultural epidemic. Now more than ever our particular brand of democracy is put to the test.

Mr. Harold J. Laski in a recent article called "The Obsolescence of Federalism" questions whether in our increasingly complex social and economic structure, democracy can endure under a system of Federalized State governments, with a National Government that is one of strictly limited powers. I believe it is possible for democracy to endure, yes, to be strengthened, under our present form of government. Nevertheless, I think some of Mr. Laski's observations deserve our careful consideration.

"Political systems live by the results they obtain for the great mass of their citizens," he says. "A democracy is not likely to survive on formal grounds merely; it will survive as it is able to convince its citizens that it adequately protects their powers to satisfy the expectations they deem their experience to warrant. In the present phase of American capitalist democracy, the central

government largely lacks the power to implement the ends it is essential it should serve if its democratic context is to be maintained. It cannot obtain adequate standards of government in many of the major fields it seeks to enter. It is hamstrung, partly by the division of powers from which it derives its authority; partly because the Constitution has not enabled it to develop the instrumentalities essential to the purposes it must seek to fulfill. Its effort to obtain the proper recognition of collective bargaining may be stricken into impotence by a State law against picketing. Its effort to produce proper control of public utilities may be rendered vain by local franchises granted in a period when the recognition of the need for uniformity in this field had not dawned upon the public consciousness. So, also with conservation; with the provision of adequate educational opportunity; with the effective prohibition (a commonplace of any well-ordered state) of child labor; with the coordination of relief for unemployment; with public works, especially in the utilization of the possible sources of electric power; with public-health legislation.....; with a proper policy of public roads -- witness the breakdown of Federal-State cooperation in Arkansas in 1923, in Kansas in 1926 and Maine in 1929; with a proper policy in housing." 3/

Mr. Laski's argument is not that "government services ought to be centralized in Washington", but that "there are certain objects of administrative control now left to the States for which they are no longer suitable units of regulation" and that "the proper objects

3/ The Obsolescence of Federalism. The New Republic. New York.

of Federal supervision cannot any longer be dependent upon State consent".

Now, one need not go all the way with Mr. Laski, in his remedy, in order to agree with him upon the nature of the problem. Indeed, Congress itself tacitly admitted the problem when it began in 1933 the policy of appropriating money directly to the Secretary of Agriculture for his expenditure in such programs as those of the Agricultural Adjustment Administration, the Farm Security Administration, and the Soil Conservation Service. With every year since, this trend toward imposition of responsibility upon the National Government's executive branch for dealing directly with the individual citizen has become more pronounced. And each act of expansion was a tacit affirmation that the breakdown of our economy in the late twenties strengthened the insistence that the Federal Government do something. Each was an admission that cooperation of 49 separate governmental units, unless implemented in some way, was too cumbersome to rely on in a time of crisis. Never before on such a scale had Congress laid upon the executive branch of the National Government such responsibilities. We have seen how the inevitable corollary of those responsibilities was the closer partnership of the individual with the Federal Government. I propose now to turn to the final step - Government's attempt to make this partnership with farm and rural folk an efficient one, the county agricultural planning project.

III

Let us assume that I have made out a good case for the desirability of getting the people to participate in these Federal programs, that we are in substantial agreement on this point. Where, then, does the expert, the man of technics, come into this picture? I have drawn upon Mr. Laski's ideas and felicitous phrases at some length already but I feel impelled here to help myself to some other words of his that seems to me wise and true.

"The expert, today," Mr. Laski says in another paper, "is accustomed to a veneration not very different from that of the priest in primitive societies; for the plain man he, like the priest, exercises a mystery into which the uninitiated cannot enter. To strike a balance between necessary respect and skeptical attack is a difficult task. The experience of the expert is so different, his approach to life so dissimilar, that expert and plain man are often impatient of each other's values. Until we can somehow harmonize them, our feet will be near to the abyss." 4/

"Just because they are experts", Mr. Laski says in this same paper, "the whole of life is, for them, in constant danger of being sacrificed to a part; and they are saved from disaster only by the need of deference to the plain man's common sense. It is, I believe, upon the perpetuation of this deference that our safety very largely depends."

Now this kind of common sense is not the enthronement of the dull and ordinary at all. It harks back to the kind of Common Sense that was the subject matter of Thomas Paine, a quality that

4/ The Limitations of the Expert. Harold J. Laski. Harpers Magazine

is associated with the hardheadedness of the true democrat, the sturdy self-reliance that not only insists upon liberty but discharges the responsibilities of liberty. To that kind of common sense, the technician's knowledge inevitably must be the servant, must be the minister rather than the master.

What does this mean for the relationship of government to agriculture in terms of the here and now? Well, it means that the layman, the farmer, not only must help to administer these giant programs for his welfare, but that he also must enter actively into the formulation of those programs. Nor will it be enough simply to ask him to sit in with the technician and lend his advice. No, his thought must become an integral part of the program itself, if he is to apprehend fully that democracy can give him what he wants, if he is to sense the responsibility that accompanies liberty and the rewards that flow from that acceptance. He cannot be asked to do "pure" research, or to help the expert continue to do the kind of research to which I have alluded earlier in this paper. The technician can do that much better than the average man, and the average man's potential contribution will never be realized unless he has the power of decision himself.

A final important aspect of this matter to which I wish to call attention has been summed up by my friend, F. F. Elliott, president of the American Farm Economic Association and chief of the AAA's program planning division. Dr. Elliott said in a neighboring city, Detroit:

"Any close scrutiny of our past land policy or administration of public lands will indicate.....that the Government actually can

do only what people in the locality most affected will permit it to do. The Forest Service, for example, probably has as great a degree of control over the national forests as any other agency administering large areas of public lands. But in a recent article an Associate Chief of the Forest Service estimated that the current carrying capacity of ranges on the national Forests was 30 percent below potential productivity, and further indicated, 'recovery could be hastened by reducing the number of livestock grazed, but heavy reduction would place an extra burden on an already sorely pressed industry.' In short, in any consideration of public control of land use the nature or manner in which the democratic process works must always be taken into account." 5/ Expert decisions expertly arrived at will never accomplish that objective.

To put it flatly, then, the expert must be the counselor, the citizen the one who decides.

Realization of any theory always is more complex than it would appear to be on paper, even the theory of simplification. In setting about assuring to the farmers the power of decision in formulating agricultural programs of Government, we must work within a framework that has never been shaped specifically to that task. This entails an organization and an attitude. The organization is embraced in a partnership between the Bureau of Agricultural Economics and the Land-Grant Colleges, working through the State and Federal Extension Services, in the establishment of community, county, and State agricultural planning committees of farmers and technical advisers. The Bureau, as the central planning agency of

5/ Proceedings of the American Farm Economic Society. The Journal of Farm Economics.

the Department, is represented at each college by a State Representative who is the secretary of the State Land Planning Committee and a member of a joint Land Grant College-BAE committee composed usually of a representative of the Extension Service and a representative of the Experiment Station, in addition to the Bureau's representative.

The objective of this organization is to provide for adequate farmer participation in agricultural policy-making in communities, counties, and States; and to provide a direct channel from farmers to the appropriate Government agencies in Washington that are charged with administrative responsibility for programs that affect the farmers. Whether it will prove successful depends upon the second of the two factors that I have mentioned as bearing upon the practical means of achieving an agricultural policy through adequate farmer participation. This second factor is that of attitude. A determination to avoid the confusions and perils of bureaucracy, on the part of technicians, and a faith in the usefulness of their activity, on the part of the farmer, are the essentials of this attitude.

Perhaps some specific references will help me to make clear the way this relationship between Government and agriculture works in practice. Earlier, I have referred to the Soil Conservation Service project in northern Wisconsin in which land is being bought in 24 counties to complement the zoning work of those counties. You may know the virtues and limitations alike of rural zoning ordinances. Not least among the latter is their inability to correct past mistakes in land settlement. The land purchase

project in northern Wisconsin is designed to assist the counties in solving this problem by public purchase of the farms that constitute the most notable instances of use of the land not in conformity with the approved pattern. Now, such purchases obviously set up waves of local influence that cannot be gauged fully in Washington, or even in Milwaukee. Only local decision, abetted by such expert counsel as may be sought, can take into account the multifarious factors that must be regarded. Hence, county agricultural planning committees in northern Wisconsin are recommending and approving the purchases that are being made under this project.

Across the lake in Michigan, too, we have a rural zoning instance that is an apt citation here. Last year, Michigan county committees got started on the job of mapping all of the counties in the State, and this year they are going over those maps, getting more farmers to participate in the work and revising the maps. Most of you know that Michigan has an enabling act authorizing county zoning ordinances. Menominee County, operating under this enabling act, has approved by referendum the drafting of such an ordinance. But the county has recognized the wisdom of delaying the preparation of the ordinance until the county and community agricultural planning committees have classified Menominee County's land. Here, too, the value of the average man's judgment is obvious.

Then, over in Minnesota, to turn your attention westward, a pioneering effort in county planning has been made in Koochiching County, where a good many months back the people started working on the problems of their county. As they studied them, they became impressed with the gravity of this same problem of isolated

settlement in areas where cost of public services was exorbitant. They asked and received technical help from the Bureau and from their Land-Grant College in getting together information as to the extent of isolated settlement, costs of public services, and status of tax delinquent land. They then mapped the areas unsuited for farming but open to settlement, and armed with these data went to an interim committee of the State legislature.

This committee, in turn, became interested, and the upshot was that the legislature has adopted four important pieces of legislation. These are a zoning enabling act, a provision for title clearance of tax forfeited land so that the State can receive a clear title when it takes over such land, authorization of the exchange of state-owned land for lands of the United States or for private lands, and provision for the classification of tax delinquent land for resale or for retention by the State as conservation land, either of which is subject to approval by the State Conservation Commission. It is unnecessary for me to stress to this audience the beneficial character of such acts. What I should like to emphasize is that the force that motivated this legislation came from the people themselves and from their wrestling with the problems of their community.

IV

We have surveyed a little of the past and have taken a look at the problems of the present. What of the future? What kind of farm programs may we expect? What will the role of Government and of the individual be then?

Our troubled present is the framework of reference for that future, and many of its indices are apparent. To start with the most important factor, now and in the future, the people, we know that during the depression more than a million persons of working age were added to the population every year, and that of these more than 600,000 ordinarily would seek jobs. From 1930 to 1940, then, while the country is wrestling with acute economic difficulties, it also is forced to deal with a 6,000,000 increase in those who want jobs. We may say that by the middle of 1937, employment in the Nation had just about regained the level of 1929, but that unemployment had increased by about the number of new workers added to the population.

Commercial agriculture as now constituted offers no haven of hope for these jobless, for farm population has increased by 200,000 a year since 1930 and by 1938 was 1,650,000 greater than it was in 1930 despite some migration. On the other hand, the cities currently offer little hope to those displaced in agriculture. Indeed, people driven off the land in the poorer areas already have created a staggering migratory labor problem, particularly on the Pacific Coast. They come from areas where farm population is in excess of what the land resources will support. Furthermore, people are increasing in numbers most rapidly in these very areas. The 400 counties that stand at the bottom of the scale in levels of living are among the highest in population increase. In fact, if they were given 30 years without migration the population of the poorest counties would double what it is now.

Population experts say that our population will begin to decline in another quarter century or thereabouts but even if this pressure from rising population did not exist, conditions in such areas would be grave. They are the areas of poor land, of low income, of high birth rate. There, 15 to 20 percent of the families were on relief in 1934-35, twice as many as in the so-called normal areas. There, cumulative Federal aid from January 1, 1933, to March, 1938, amounted in some counties to as much as \$200 for each man, woman and child, more than four times the average in other rural areas.

To sum up, 3,000,000 farm families are in desperate need. How do our present programs stack up against that need? Well, the FSA's 146 homestead projects will take care of 12,000 families, tenant purchase loans will have established 7,000 families on their own farms by the end of this month, and rehabilitation loans will have helped to put 680,000 families on their feet, in varying degree. The FSA has made direct aid grants to 413,000 families and the Works Progress Administration has given work to about a half million more.

Yet the fact remains that agriculture, with 9 percent of the national income, must rear and educate 31 percent of the people.

The farm programs of the future must take these facts as their point of departure. The form they will take is of course a matter for Congress to decide. Yet Congress is simply the mouthpiece of the people's desires, and I think it is possible to see in our present the shapes of those desires.

What about, for one thing, the maintenance of the total farm income and of farm prices? In recent years, the major effort of those dealing with farm problems as a single entity has been to support and increase total agricultural income and the levels of farm prices through such devices as benefit payments, production adjustment, and marketing controls. I believe the temper of the people, urban and rural alike, is such that these objectives will remain continuing objectives, just as the temper of the people appears to insure the payment of a living wage as an industrial objective.

The questions that hedge that agricultural objective, however, are large ones. Can the vast expenditures that such programs require be continued indefinitely? Can a program for attainment of that objective be included in a program in the general interest as well as in the interest of farmers as a group? In attempting to find the answers to those questions, there is another very pertinent attitude of the people that enters. I believe it is pretty well accepted now by farm and labor groups alike, and by others, that the problem is not one simply of maintaining a healthy commercial agriculture, but that it is a problem involving the working out of new patterns of living.

As I see it, the farm programs of the future that the people will insist upon will strive not only to give farmers as a class a level of living more commensurate with their importance to the Nation but also to maintain and reconstruct our soil resources; to give help in particular to the bottom one-third of farmers that is rapidly becoming two-thirds; to bolster the rural culture that

has been one of the most valuable characterizing traits of American civilization. Those things are basic.

I do not propose, in discussing the achievement of these aims, to attempt to foresee everything that will happen in the future. It must be remembered that nothing about agriculture is static, now or in the future, and that the coming farm programs will develop new needs and new approaches as they are functioning. Yet it is possible to say that they must attack the problem on both sides, the urban and the rural. On the one hand, industrial recovery or Government investment must provide the missing absorptive factor that will help to take up the slack in surplus population and to give rural areas added income, on the industrial side. On the other hand a satisfactory relationship must be worked out between the people and the land, on the agricultural side. To put concretely the question facing us, should the former absorptive factor be supplied, so far as Government is concerned, by the employment of surplus rural workers in extensive public service and other public programs in rural areas, under a flexible program permitting contraction and expansion as the requirements of private industry are indicated? Are not such a program and industrial expansion mutually compatible? Should not such a program be predicated upon the interlocking interests of agriculture and industry, and upon the assumption that rising rural income will help industrial production levels?

Public works in rural areas have their limitations, but those limitations may not be insuperable. And in such service fields as education, public health, public welfare, soil conservation,

and forestry, we may well ask ourselves if the need is not so great as to make opportunity almost boundless, practicably speaking. This need would be thrown into sharp relief both by the program that I have just touched upon and by any program designed to bring about a satisfactory adjustment of the people to their land resources. For what the Nation would be doing would be creating new patterns of living in rural communities. If we as a Nation sought to bring about this adjustment, we would have to employ numerous tools. As an instance, there is the payment of cash benefits both as inducement and as compensation to ~~supplement~~ such police power as it may become necessary to invoke. The medium of public purchase of land is a two-edged tool: It could be a tool to help shut off from settlement those areas which are demonstrably incapable of yielding a livelihood, on the one hand, and to give an avenue to farm ownership, on at least a subsistence basis, to everyone capable of operating a farm, on the other hand. This would mean, too, that land no longer suitable for farming must be developed in its proper functional use to return a living to so many as it is capable of supporting through forestry or grazing or similar uses.

Now, this would mean for large segments of the rural population a turn from a strictly commercial agriculture toward part-time farming supplemented by income from other sources, either from private industry or from public programs of works or service. Let me emphasize, however, that such a turn from strictly commercial agriculture would be much more than a turn toward simply a subsistence agriculture.

This country has a pretty brutalizing form of that kind of subsistence agriculture right now, as is indicated by the title of a recent book, Mr. Arthur S. Raper's "Preface to Peasantry." I have said before, and I repeat, that the evolution of new patterns of living in these areas is a major consideration. If the Nation closes up submarginal land, if it helps people to resettle on subsistence farms, if it gives them work rebuilding our natural resources or bringing the public services of a modern day to their communities, it is turning them away from commercial agriculture, and yet it does not divert them into the stream of industrial or business employment. Will it not become necessary, then, to supply through the power of the National Government, the funds to make such an agriculture one that will be an adornment and not a reproach to our Nation? Will it not be incumbent upon the Federal Government to supply the funds for the health, the educational, the cultural, the social services that will be required to give these people their rightful place in the most intricate technological culture in the world?

Those are the terms in which I believe it is necessary to think about the farm programs of the future, but we must not omit one additional all-important item. That item returns us to the subject of this paper: What will be the relationship of Government to the people in agriculture under such programs? The form that such programs shall take, the amount of money that shall be spent, the other all-important authorizations for such programs naturally will come from Congress. But we have seen that Congress can only

give the broad authorizations; we have seen that there is danger of great programs under such broad authorizations falling of their own weight. It has become evident, too, I take it, that the State Governments cannot be expected to administer programs that, in their essence, are national or regional and that yet touch the individual very closely.

Thus discussion of the future of Government in agriculture turns inevitably upon the necessity for the increasing dependence of such programs upon the people, the increasing of such programs by the people, and the increasing enthusiasm with which they are carried out by the people for themselves. Only through programs built upon so solid a base as this can staggering annual drafts upon the Treasury be avoided, and only such programs can attain fully the great human objectives that I have enumerated earlier. Lastly, only such a relationship between Government and the farmers can secure for our country the cultural boons of a vigorous agriculture and a continuing democracy.

American Agriculture Indebted To Abraham Lincoln More Than To Any Other of Our Presidents

By ELMO SCOTT WATSON

(Released by Western Newspaper Union.)

A TALL man in rusty black arose from his chair on a flag-draped platform and made his way awkwardly to the speaker's stand. He seemed ill at ease as he gazed on the weathered faces of the crowd before him.

Then he began to speak. Almost at once his self-consciousness vanished. His sorrowful, deep-set eyes lighted up. His voice warmed. His hearers leaned forward to catch each word.

"No other human occupation," he said, "opens so wide a field for the profitable and agreeable combination of labor with cultivated thought as agriculture... Every blade of grass is a study; and to produce two where there was but one is both a profit and a pleasure. And not grass alone, but soils, seeds and seasons; saving crops, diseases of crops and what will prevent and cure them; hogs, horses and cattle; trees, shrubs, fruits, plants and flowers—each is a world of study within itself."

The speaker was Abraham Lincoln. The time was September 30, 1859. The place was the agricultural fair held by the Wisconsin State Agricultural society at Milwaukee.

Most Americans remember Lincoln as our first martyred President, as the Great Emancipator, as the statesman whose principles have stirred men everywhere. Few, perhaps, realize what a profound influence Lincoln and his administration left on the agriculture of the United States. Yet all his life he was a close student of farming. He knew its needs and foresaw the possibilities of its advancement as few men have done before or since. And it was as a nationally recognized representative of the farmer and the small town democracy he knew so well that he was invited to address that meeting in Milwaukee.

These things considered, it is not surprising that in the anguish of the Civil war that threatened the nation's existence, Lincoln found time to promote the cause of agriculture and give it an impetus that is felt down to this day.

Boyhood on a Farm.

Abe's early boyhood was spent on a farm of 30 acres near Knob creek, about 10 miles northeast of his birthplace at Hodgenville, Ky. Because of the hills and gullies only 14 acres could be cultivated.

In the fall of 1816 the Lincoln family moved again—this time across the Ohio river into the heavily timbered wilderness of southern Indiana. Here they established themselves on a knoll surrounded by marshy, malaria-ridden fields. There was no drinking water within a mile. Although Thomas Lincoln acquired an option on 160 acres to be paid for in installments at \$2 an acre, he completed payments on only half of this land. The elder Lincoln continued to vary his farming and hunting by doing occasional jobs of carpentry. In 1824, after the family had been in Indiana seven years, the cultivated area of the farm totaled only 17 acres.

Thus young Lincoln as a boy of 15 was hired out to the neighbors to plow, hoe corn, split rails and make fences. He also worked as a ferryman on the Ohio river. For this work his father received \$6 a month. During the hog-packing season, however, he received an additional 31 cents a day.

Once more the Lincolns pushed westward. This time it was early in the spring of 1830 and the family trekked to the bluffs along the Sangamon river in Macon county, Illinois. Reaching majority soon afterward, Abraham Lincoln bade farewell to his family and began life for himself.

Although he left farm work behind as a career, Lincoln never ceased to interest himself in agriculture. As a surveyor, as postmaster and storekeeper at New Salem, as a lawyer riding the court circuit around Illinois, as a congressman and as President he

continued to be a student of farming and farm improvement.

When Lincoln entered the White House, farming was being carried on much the same as it had been in the past half-century. Man and horse power were still the main reliance on the average farm, although an impressive start had been made toward mechanization and improvement of farm implements. It took about as long to plow a field, plant a crop and cultivate it as it had taken in Revolutionary war days. This was particularly true of the newer areas of settlement.

The reaper had been invented about 30 years before, but its use was by no means universal. The steel plow had been introduced in the late 1830s and had helped speed the opening of the newly settled West. The science of soil chemistry was even more recent. Although experiments in plant feeding in Europe led to the establishment of the modern fertilizer in this country in 1850, production amounted to only 20,000 tons in 1860. Today American farmers use nearly 8,000,000 tons annually.

Aids to Agriculture.

Soon after his inauguration, Lincoln began throwing the weight of his influence behind measures that would strengthen



JUSTIN S. MORRILL

the position of agriculture and promote its future growth. This was sound strategy in view of the impending Civil war. Within a year three bills of outstanding significance had been passed. These were the Act Establishing the United States Department of Agriculture, the Homestead act, and the Land Grant College act. Agriculture today owes a debt to the administration which sponsored these acts. The progress it has achieved in the past 75 years would never have been possible without them.

As early as his first message to congress in December, 1861, Lincoln pointed out the necessity for a department of agriculture.

"Agriculture, confessedly the largest interest of the nation," he declared, "has not a department, nor a bureau, but a clerkship only assigned to it in this government.

"While it is fortunate that this great interest is so independent in its nature as not to have demanded or extorted more from the government, I respectfully ask congress to consider whether something more cannot be voluntarily given with general advantage."

The Act Establishing the Department of Agriculture was the result, and in his second annual message the President was able to report:

"To carry out the provisions of the Act of Congress of May 15th last, I have caused the Department of Agriculture of the United States to be organized. The Commissioner informs me that within the period of a few months, this department has established an extensive system of correspondence

and exchanges both at home and abroad which promise to effect highly beneficial results in the development of a current knowledge of recent improvements of agriculture, in the introduction of new products, and in the collection of the agricultural statistics of the different states. Also it will be prepared to distribute, largely, seeds, cereals, plants and cuttings, and has already published and liberally diffused much valuable information in anticipation of a more elaborate report which will in due time be furnished, embracing some valuable tests in chemical science now in progress in the laboratory."

Lincoln closed his statement with the hope that the department would "realize at not too distant a day all the fondest anticipations of its most sanguine friends and become the fruitful source of advantages to all our people."

How prophetic was this hope is a matter of history. Although the department was not represented in the cabinet with a secretary until 1889, it proved its worth immediately. Today every farm home feels its benefits. County agents everywhere assist farmers in improving their farm methods, testing their soil to determine its plant food needs, advising them on how to increase the productivity of their holdings.

The Homestead Act.

Another milestone in agricultural development was the Homestead act, signed by President Lincoln on May 20, 1862. During the course of its operation nearly 250,000,000 acres of public domain have been thrown open to private farm ownership.

Instead of requiring the payment of \$1.25 or more per acre, the Homestead act gave 160 acres free to every settler who would live on it for five years. Settlers rushed into the new lands, and while the Civil war was still in progress 2,500,000 acres were thus given away. This created more than 15,000 farms of 160 acres each. New railroads were built to link the western farm lands with the eastern markets. The new crops helped feed the Union armies, furnish fibers and raw materials to factories, and provided an exportable surplus which built a profitable trade with Europe.

Most important step in aiding the cause of scientific agriculture was the Morrill act, or Land Grant College act, named for Justin S. Morrill, representative in congress and afterwards senator from Vermont. Signed by President Lincoln on July 2, 1862, this law gave to each state as many times 30,000 acres of public land as it had senators and representatives. This land was to provide funds for the establish-

ment and support of a "college of agriculture and mechanical arts."

The far-flung system of agricultural colleges in every state of the Union today owes its existence to this act. These colleges are a powerful factor in discovering new facts concerning the soil, its needs, crop and live stock improvement and better farming methods. Not only do these colleges educate young men to apply these facts and methods in actual farm work, but agronomists and soil scientists are continually carrying on experiments with crops, soils and fertilizers in their states. As a result of their work, the average farmer can have the benefit of expert and practical advice in preparing his soil for profitable crop production. Many of these colleges provide recommendations for fertilizer grades best adapted to the needs of a farmer's soils and crops after a test has established the necessity for nitrogen, phosphorus and potash.

"Lincoln's contributions to the development of agriculture," said an official of the Middle West Soil Improvement committee recently, "stand as much a monument to his greatness as any of his other achievements during his presidency. It was astounding that under the stress of war and destruction he could have sponsored and supported measures that would have such epochal consequences to our development."

Lincoln Established Department of Agriculture 84 Years Ago

Great President Always Remained A Farmer at Heart

Abraham Lincoln sat at his desk studying a document a clerk had laid before him. Now and then he would raise his eyes to glance out the window at a blue-clad sentry pacing the White House lawn.

Soon he finished reading, took off his steel-bowed spectacles, reached for a pen and signed his name to the last page.

The paper he signed that May day in 1862 was not an army-shifting order that would change the tide of battles, but nevertheless its effects have been felt in war and peace in the three-quarters of a century that have followed. The document was an "Act to Establish the United States department of agriculture." Thus in the agony of the Civil war was born an organization which today serves six million of the nation's farms.

Americans remember Lincoln best as the Great Emancipator whose principles have stirred men the world over. Few citizens, perhaps, realize the profound effect Lincoln and his administration had on the agriculture of the United States. For not only did he foster the act establishing the U. S. department of agriculture, but he promoted other legislation that has speeded its development to this day.

Lincoln was farm bred. He never lost the feel of the earth. All his life he was a close student of agriculture. He knew its needs and the possibilities of its advancement as few presidents have before or since. The story of Lincoln's boyhood on the farm is an American classic. His early days were spent on a 30-acre tract near Knob creek about 10 miles from his birthplace at Hodgenville, Ky.

Moved to Indiana.

When Abe was seven years old, the family moved across the Ohio river into southern Indiana. Tragedy was to come early into the young boy's life for it was here that his mother, Nancy Hanks Lincoln, died. The Lincolns had established themselves on a knoll surrounded by low-lying, marshy fields. Abe had to walk a mile to haul drinking water.

Thomas Lincoln had taken an option on 160 acres of land at two dollars an acre. He completed payments on about half of that total, varying his farming activities with hunting and occasional jobs of carpentry. Seven years after the family had arrived in Indiana, the farm's cultivated area totaled only 17 acres.

The Lincoln family moved to Illinois in 1830, taking up land along the Sangamon river in Macon county. Soon after arriving, Abe reached his 21st birthday. That meant freedom from his father's yoke. So he bade farewell to his family and moved on to New Salem.

Student of Agriculture.

As a successful lawyer riding the Illinois circuit and visiting neighboring states occasionally to try cases, Lincoln was a close student of agriculture. He was often invited to speak before farmers' meetings. One of the most notable instances historians record of his appearances before farm groups came in 1859—a year before he was elected President—when he was invited to address the agricultural fair held by the Wisconsin State Agricultural society at Milwaukee.

On that occasion he said:

"No other human occupation

opens so wide a field for the profitable and agreeable combination of labor with cultivated thought as agriculture. Every blade of grass is a study; and to produce two where there once was but one is both a profit and a pleasure. And not grass alone, but soils, seeds and seasons, sowing crops, diseases of crops, what will prevent and cure them; hogs, horses and cattle; trees, shrubs, fruits, plants and flowers—each is a world of study within itself."

His words were prophetic of the research conducted today by plant breeders, animal husbandmen and soil scientists at state agricultural colleges and experiment stations.

There was great room for progress in agriculture when Lincoln entered the White House. Farming was still being done with horse power although an impressive start had been made in mechanization. But it still took about as long to plow a

"I have caused the department of agriculture of the United States to be organized to carry out the act of congress of May 15th last. The commissioner informs me that within the period of a few months this department has established an extensive system of correspondence and exchanges, both at home and abroad, which promises to effect highly beneficial results in the development of a current knowledge of recent improvements of agriculture, in the introduction of new products and in the collection of the agricultural statistics of the different states. Also it will be prepared to distribute largely seeds, cereals, plants and cuttings, and has already published and liberalized its office of such valuable information."

The department of agriculture thus played its part in the Civil war. Its services to the nation's farmers have continued to grow. Every farm home today feels its



ILLINOIS HOMESTEAD . . . This is the last farm home built by Thomas Lincoln, father of the president. He never left his father built the house and visited it often. It is in Coles county, near Charleston.

field, plant a crop and cultivate it as it had in George Washington's time. This was particularly true in the pioneer areas of settlement in the West.

Reaper Coming Into Use.

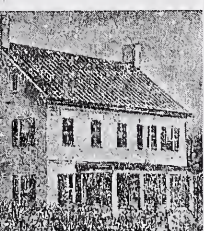
The early 1830s had witnessed the introduction of the reaper but its use was not universal when the Civil war broke out. Farmers had been using the steel plow for about 25 years. The modern fertilizer industry was not established until 1850, after scientific experiments in Europe had demonstrated the value of plant feeding. By 1850 production had reached only 20,000 tons. Last years farmers used more than 12,000,000 tons.

Food production was just as important in the Civil war as in World Wars I and II. Lincoln and his advisers sought measures both near and long range that would strengthen the position of agriculture. The administration threw its weight behind three major bills and within a year they had become the law of the land. They were: the act establishing the U. S. department of agriculture; the land grant college act to which the nation's farmers today owe the existence of the far-flung system of agricultural colleges in every state of the union, and the homestead act.

Lincoln had advocated the establishment of a department of agriculture in his first message to congress, in December, 1861. Then he had said:

"Agriculture, confessedly the largest interest of the nation, has not a department nor a bureau, but a clerkship only. While it is important that this great interest is to be independent in its nature as not to have demanded or extorted more from the government, I respectfully ask congress to consider whether something more cannot voluntarily be given with general advantage."

By the time he delivered his second annual message, the department had been created and Lincoln was able to report:



benefits. Farmers everywhere are assisted by county agents in improving their tillage methods, teaching their soil to determine plant food needs, so as to increase the output and quality of their crops.

The land grant college act of the Morrill act signed by President Lincoln on July 2, 1862, marked a milestone in the development of scientific agriculture. The act gave to each state as many times 30,000 acres of public land as it ran senators and representatives—this land to provide funds for the establishment and support of "a college of agriculture and mechanical arts."

"Today the state agricultural colleges which Lincoln's administration helped to create are the farmers' greatest allies," said a statement of the Middle West soil improvement committee recently. "Their scientists and teachers are constantly discovering new facts about the soil and its plant food. Their public domain have been improved and better farming methods."

Practical Training.

"These colleges equip young men to apply their training to practical farm work. Here and in the agricultural experiment stations, agronomists are carrying on tests with crops, soils and fertilizers. The benefit of this information is available to any farmer seeking advice in applying nitrogen, phosphorus and potash to his land for profitable crop production."

The third great agricultural measure which marked Lincoln's contribution to the future of American farming was the homestead act which he signed May 20, 1862. Since the day this act became operative approximately 250 million acres of public domain have been thrown open to farm ownership.

The effect of the homestead act in promoting farm production during and after the Civil war was tremendous.

By its provisions, 160 acres of land was given free to every settler who would live on it for five years. Landseekers rushed to take advantage of the offer. Before the war ended 2.5 million acres were allocated—or an average of 15 thousand farms of 160 acres each.

Railroad lines were extended to link the western farm lands with the markets of the east. The food products new farms produced helped supply the union armies, and combined with the agricultural output of the east built up a surplus that found a profitable market in Europe.

Following the Civil war the homestead act was instrumental in building up the farming empire west of the Mississippi which became the land of opportunity for the veterans of that war.

As America hails the 137th anniversary of Lincoln's birth, his agriculture acknowledges its debt to him. The progress farming had made in the past 80 years would not have been possible without his help.

LINCOLN VIRGINIA HOMESTEAD . . . The ancestral home of Abraham Lincoln in the Shenandoah Valley, Virginia. John Lincoln, grandfather of the martyred president, built the original house. Thomas Lincoln, father of Abe, was born here before the family moved to Kentucky.

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TOWN *Oregon*, ILL.
DATE *Feb 29*, 1946

LINCOLN'S FARM LIFE OUTSHONE BY WASHINGTON

Virginian Shown as Real Man of Soil in Contrast to Commoner.

BY HARRY M. BEARDSLEY.

There is a paradoxical twist in the current concept of Abraham Lincoln as a man of the soil—a rugged frontiersman.

Washington, by contrast, stands etched in the public consciousness as a general in epaulets and gold braid, an aristocrat in powdered white wig and ruffled white stock, a fox-hunting gentleman.

Yet Washington was far more of a frontiersman than Lincoln, was thoroughly at home in the wilderness and lived most of his life in direct and intimate contact with the soil. He was a real farmer, thoroughly familiar with the character of soil in each of his many fields, experimenting continually with crops and soil treatment. He loved the land, loved to buy and sell huge tracts. It was almost a mania with him. He denied himself and his family luxuries in order to add to his vast real-estate holdings. Throughout much of his life he was "land poor."

Both Lincoln and Washington were surveyors in their youth, measuring the land, establishing boundaries, laying out roads, but for Lincoln the job possessed no real attraction, whereas, Washington was fascinated by the work, brought to it a shrewd sense of land values and became one of the biggest land owners and land developers of his time.

Diaries Tell Story.

One has only to glance through Washington's diaries to appreciate how truly he was a man of the soil. The pages reek with the odors of the barnyard, of fresh ploughed earth and curing ham. They abound in records of crop-sowing dates, harvest dates, comparative yields per acre, rainfall and temperature data.

Washington as traveler made many

expeditions in wild and unsettled regions and everywhere he noted the character of the land, appraising every foot of it, not only as farmland, but with the keen eye of the real-estate developer. No potential townsite, no falls or rapids that might yield water power, no indication of mineral deposits escaped his notice.

Lincoln, on the other hand, for all his reputation as a man of the soil, had comparatively little direct contact with it, aside from his boyhood days. His activities as a farmer were slight, and he displayed no genius for wresting a living from the soil, no love for agriculture as a science or a hobby, such as Washington displayed. Furthermore, he evinced no talent for land speculation, and his achievements in promoting public welfare through development of the land by public improvements are not inspiring.

Cites Lincoln Transaction.

There is record, however, of one big real-estate transaction which he attempted to promote. It is so fantastic that some historians and biographers have attempted to treat it as a joke, citing it as an instance of his irrepressible clowning, and asserting that it must be obvious that Lincoln could not have been in earnest.

But the event occurred in a period of Lincoln's life when he was connected with many fantastic projects, entered into through ignorance on his part possibly, but certainly without his tongue in his cheek.

The setting for Lincoln's proposed \$5,000,000 real-estate deal seems strangely modern. There was much scandal in circulation about the canal commissioners; stories of "whoopie" parties financed by public funds; the public treasury was depleted by governmental extravagance; the country was in the midst of a prolonged and profound business depression. The legislature was in session trying desperately to save the state from bankruptcy. No, the time is not 1932—the period covered was the 1830's, when Lincoln was in the state legislature.

"The Long Nine" Era.

The elections of 1836 sent nine legislators—two senators and seven representatives—to the legislature from Sangamon county, all pledged to exert every influence that could be brought to bear to move the state capital from Vandalia to Springfield. This group soon became known as "The Long Nine," because each of its members was well over 6 feet in height. Lincoln was one of the seven representatives.

Prosperity was at high tide in 1836. A great land boom was under way, all over the country governmental bodies were spending huge sums for public improvements. Coincident with the opening of the legislature a public-improvement congress assembled at Vandalia to which most of the legislators were delegates, and after much optimistic oratory and many rosy forecasts, they adopted a comprehensive program of public improvement and entrusted it to Stephen Douglas to introduce in the legislature.

Springfield's principal rivals were Vandalia, Alton, Peoria and Jacksonville, but there were many other towns with lofty ambitions. Some of them, like "Illiopolis," existed merely on paper. "The Long Nine" traded their votes for various items on the improvement bill in return for support of Springfield. Thus, Alton was induced to relinquish its aspirations for the capital in exchange for legislation making Alton the terminus of three railroads.

Surveys Were Inadequate.

The routes of the numerous railroads, canals and turnpikes were dictated largely by political consideration. Most of them began nowhere in particular and proceeded by devious routes toward a similar destination. They were undertaken with virtually no engineering supervision.

Construction was begun without adequate surveys being made, and the bill provided that work should start simultaneously from each terminal and in each direction from each principal intermediate city along

the route, trusting to divine intervention to assure the various units meeting, or at least coming close enough together that they could be connected.

Financing was provided by bonds but by 1839 funds had been exhausted. The state was \$13,230,550 in debt and none of the projects was completed. There were locks without canals, canals without locks, bridges with no roads connecting, roads without bridges, rights of way without rails, rails without locomotives.

Amidst charges of graft and incompetence, the befuddled legislature met to grapple with the problem of restoring the state's credit, and raising funds to complete a few of the improvements.

Lincoln Proposes Land Sale.

In this crisis Representative Lincoln proposed to put the state and the federal governments in the land business. There remained unsold in Illinois 20,000,000 acres of public lands. Lincoln introduced a resolution calling on the federal government to purchase these lands at 25 cents an acre. This was about one-fifth of the current price for homestead lands; but, even so, the suggestion that the federal government, with millions upon millions of acres of land available, buy more from Illinois did not appear feasible.

Even in legislative circles the measure received no support and Lincoln's big real-estate deal never materialized. It is interesting to note that the man who finally worked out a solution for the state's financial difficulties was a Chicagoan—Justin

Butterfield, who later defeated Lincoln for the appointment of United States land commissioner for Illinois. Perhaps President Van Buren had heard of Lincoln's proposal regarding the Illinois land and considered it. Lincoln displayed no special talents.

SHUCKED CORN THREE DAYS TO EARN BOOK



SINCE today is Lincoln's birthday as well as that of a number of our Happy Tribe boys and girls, I want to tell you a little story of this great President of our United States. It will show you how much he loved books. It will make you all want to read one of the books from the list so carefully planned each week for the Happyland boys and girls to help them choose the best books.

When Abraham Lincoln was a small boy he borrowed a certain book from a rich farmer and a few days later he returned with it.

"I meant to take good care of your book, Mr. Crawford," said the boy, "but I've damaged it a great deal without intending to, and now I want to make it right with you. What shall I do to make it good?"

"Why, what happened, Abe?" asked Mr. Crawford, as he looked at the stained leaves and warped binding of his copy of Weems's "Life of Washington." "It looks as though it had been out in all of last night's storm. How did you happen to leave it out in the rain?"

"It was this way, Mr. Crawford," replied Abe. "I sat up late to read it and when I went to bed I put it away carefully in my 'bookcase' as I call it, a little opening between two walls in the logs of our cabin. I dreamed about General Washington all night, and when I woke up I took the book out to read a page or two before I did the chores and you can't imagine how I felt when I found it this way. It seems that the mud-dauburg had got out of the weather side of that crack and the rain must have dropped on it for three or four hours before I took it out. I am so sorry, Mr. Crawford, and I want to fix it up with you some way, for I haven't the money to pay for it."

"Well, said Mr. Crawford, "come and shuck corn three days and the book is yours."

My, oh! but young Abraham Lincoln was pleased. To own the book about his greatest hero seemed wonderful to him and the thought of shucking corn for three days was very little to do in order to own the book.

"I don't intend to shuck corn, split rails and the like always," he told Mrs. Crawford after he had finished reading his book. "Why, what do you want to do now?" Mrs. Crawford was surprised at the statement of the boy. "Oh, I'll be president some day," answered the lad, with a smile. "You'd make a pretty president, Abe, with all your funny tricks and jokes, now wouldn't you?" asked the farmer's wife. "But I'll study and get ready," replied the boy, "and then perhaps the chance will come." It did come, as you all know, and because he had studied so faithfully he was ready when the call came.

Tell this story to one of your schoolmates tomorrow, some one who may not read it today. In this way by sharing it with another you will make it more surely your own and will remember it always.

Happy

LINCOLN'S MANUAL LABOR



HE lad was a valuable asset in his father's family because of his great physical strength and endurance, and his abounding good nature. From the time he was fourteen he worked out as a hired hand with the farmers around the Pigeon Creek settlement. He was willing and would "turn his hand to anything," from butchering hogs to rocking the baby. Once, when asked by a farmer if he could help butcher he replied:

"I'll try. If you'll risk the hog I'll risk myself."

In the haying and harvesting fields he could outmow and outcradle the other men, but he offset this by telling stories, making stump speeches, "taking off" anybody and everybody with the comic facility of a born mimic. The men all liked to have Abe working with them, for he was full of life and his funny stories relieved the tedium of the long work-day. But it annoyed his employers to see all the hay hands standing or lying around a stump in the middle of a meadow while "that Abe Lincoln" was spouting and performing. They complained to the lad's father, who used to reproach his tall son not only for wasting his own time, but for "hindering the help." Thomas Lincoln took and kept the boy's wages until he was twenty-one. These were not large, ranging from twenty-five to thirty cents a day.

The neighbors told tales of Abe Lincoln's feats which surpass belief, but each story was vouched for by many witnesses. Mr. Richardson, the neighbor for whom Lincoln had set the "Good boys who to their books apply" copy, stated that "Abe quietly picked up and walked away with a covered chicken-house, made of poles pinned together, that weighed at least six hundred, if not more." Another time he alone took up four timbers for a corncrib which four men were preparing to remove, shouldered and carried them to the place desired. Another neighbor said "Abe could strike a heavier blow with a maul and drive an ax deeper into the wood than any other man" he ever saw; and Dennis Hanks said that when Abe was heard chopping in the woods the trees fell so fast that one would think three men were chopping there.

With all this Lincoln was called "lazy," because he "wasted so much time reading." Those farmers had limited ideas of work, and no one realized that jolly, joking Abraham Lincoln was the hardest worker of them all.



"That Abe Lincoln" was spouting and performing

